



NEW APPLICATION



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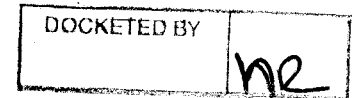
AZ CORP COMMISSION  
DOCKET CONTROL

Arizona Corporation Commission  
**DOCKETED**

MAY 12 2014

Date: May 12, 2014

Arizona Corporation Commission  
Office of Railroad Safety  
ATTN: Chris Watson  
1200 W. Washington Street  
Phoenix, AZ 85007



RR-03639A-14-0157

**RE:** Arizona Corporation Commission Application to widen existing public at-grade railroad crossings  
**Project:** Cooper and Guadalupe Intersection Improvements  
*Town of Gilbert Project # - ST 094*  
*Union Pacific Rail Road Crossing: Cooper Rd. - DOT #741816D - Rail mile 925.73*  
*Union Pacific Rail Road Crossing: Guadalupe Rd. - DOT # 741815W - Rail mile 925.63*

Mr. Watson,

This application is being submitted to the Arizona Corporation Commission (ACC) to allow the Union Pacific Railroad (UPRR) to modify the above identified crossings, on behalf of the Town of Gilbert. A field meeting was held on 3/5/2013 which identified Gilbert's intersection widening and improvement plans that affect the two railroad crossings. The existing roadway crossing condition currently has no traffic signal / train preemption interface, but does have cantilever flashing lights and a single cantilever gate for each direction at each crossing. Proposed roadway work includes adding a through vehicular lane in each direction, adding raised medians at the intersection and at the UPRR crossings, improving the pedestrian crossings and adding traffic signal / train preemption. Proposed UPRR improvements include installing additional concrete panels to each crossing, relocating gates and flashing lights for each crossing, and installing detection equipment to detect trains and interface with Gilbert's traffic signal for each crossing.

**i) Location of Crossing**

The Cooper and Guadalupe Intersection Improvements project will improve the operational characteristics and capacity of the intersection at Cooper and Guadalupe Roads in the Town of Gilbert (Town), Maricopa County, Arizona. The Union Pacific Railroad crosses two of the four legs of the intersection. Proposed roadway work includes adding a through vehicular lane in each direction, adding raised medians at the intersection and at the UPRR crossings, improving the pedestrian crossings as well as adding traffic signal / train detection and preemptive interface devices. These two railroad crossings are located as follows:

1. Cooper Crossing (DOT Crossing No. 741816D) is approximately 215' south of Guadalupe Road (Railroad Milepost 0925.73 and Railroad I.D. No. R 925.7).
2. Guadalupe Crossing (DOT Crossing No. 741815W) is approximately 305' west of Cooper Road (Railroad Milepost 0925.63 and Railroad I.D. No. R 925.6).

**ii) Why the crossings are needed**

The railroad crossings at Cooper Road and at Guadalupe Road are existing crossings that will need to be widened and improved in order to accommodate increased traffic and safety demand through the existing Cooper and Guadalupe intersection. This project was identified in the MAG Prop 400 program as a high need project. In 2012, the Town of Gilbert had a traffic engineering consultant perform a traffic study on the intersection. The study indicated a through lane in each direction was needed. In order to accommodate the through lane, each crossing will need to be widened thirty-five feet. The widening of both roadways, and hence each crossing is asymmetrical about the roadway centerlines. The majority of the added width will be to the North on Guadalupe, and to the East on Cooper. In addition, the new traffic signal will be preempted for both crossings. The existing system is not preempted by the Railroad signal equipment.

**iii) Why the Existing Crossing Cannot be Grade Separated**

With the proposed improvements to both Cooper and Guadalupe Roads, the location of the at-grade crossings remains unchanged. A grade separation would have the following undesired consequences: 1) Access to existing businesses and to anticipated development would be severed for an estimated 2,000 feet (1,000 feet on each side of tracks) along both Cooper and Guadalupe Roads; 2) There are several utilities in both Cooper and Guadalupe Roads that cannot support 30 feet of additional embankment needed for a grade-separated crossing; 3) There is insufficient right-of-way to accommodate a 30-foot high embankment slopes along both Cooper and Guadalupe Roads; and 4) The close proximity both crossings have to the intersection of Cooper and Guadalupe is inadequate to allow for the 620 feet of sight distance required by Town with a grade separated crossing.

**iv) Type of Warning Devices to be Installed**

The warning devices for eastbound and westbound Guadalupe traffic and for northbound and southbound Cooper traffic included in the design are as follows: gates with flashing lights will be installed in the medians and outside the roadways near the sidewalks. Cantilever flashing railroad signals will be installed outside the roadways near the sidewalks; and railroad safety signs and symbols will be installed per the MUTCD, part 8 standards.

**v) Who will maintain the Crossing Warning Devices**

UPRR will own and maintain the physical elements of the crossing (crossing surface, gates, flashing lights). The Town of Gilbert will own and maintain the approaching surface, signing and movement markings on both Cooper and Guadalupe Roads.

**vi) Who is Funding the Project**

The Town of Gilbert is funding this project using Proposition 400 Maricopa Association of Governments (MAG) Monies.

Should you have any questions on this information, please contact me by telephone at 480-503-6815, or by e-mail at [tom.condit@gilbertaz.gov](mailto:tom.condit@gilbertaz.gov), or Mr. Henderson by telephone at 602-263-1177, or by e-mail at [fhenderson@ritochpowell.com](mailto:fhenderson@ritochpowell.com).

Sincerely,



Tom Condit, P.E.  
Acting Town Engineer



Frank Henderson, P.E.  
Design PM/ Ritoch- Powell and Associates

Enc:

1. Conceptual Cooper drawing
2. Conceptual Cooper and Guadalupe Intersection drawing
3. Conceptual Guadalupe drawing

Cc: Jack Gierak  
Project File ST094

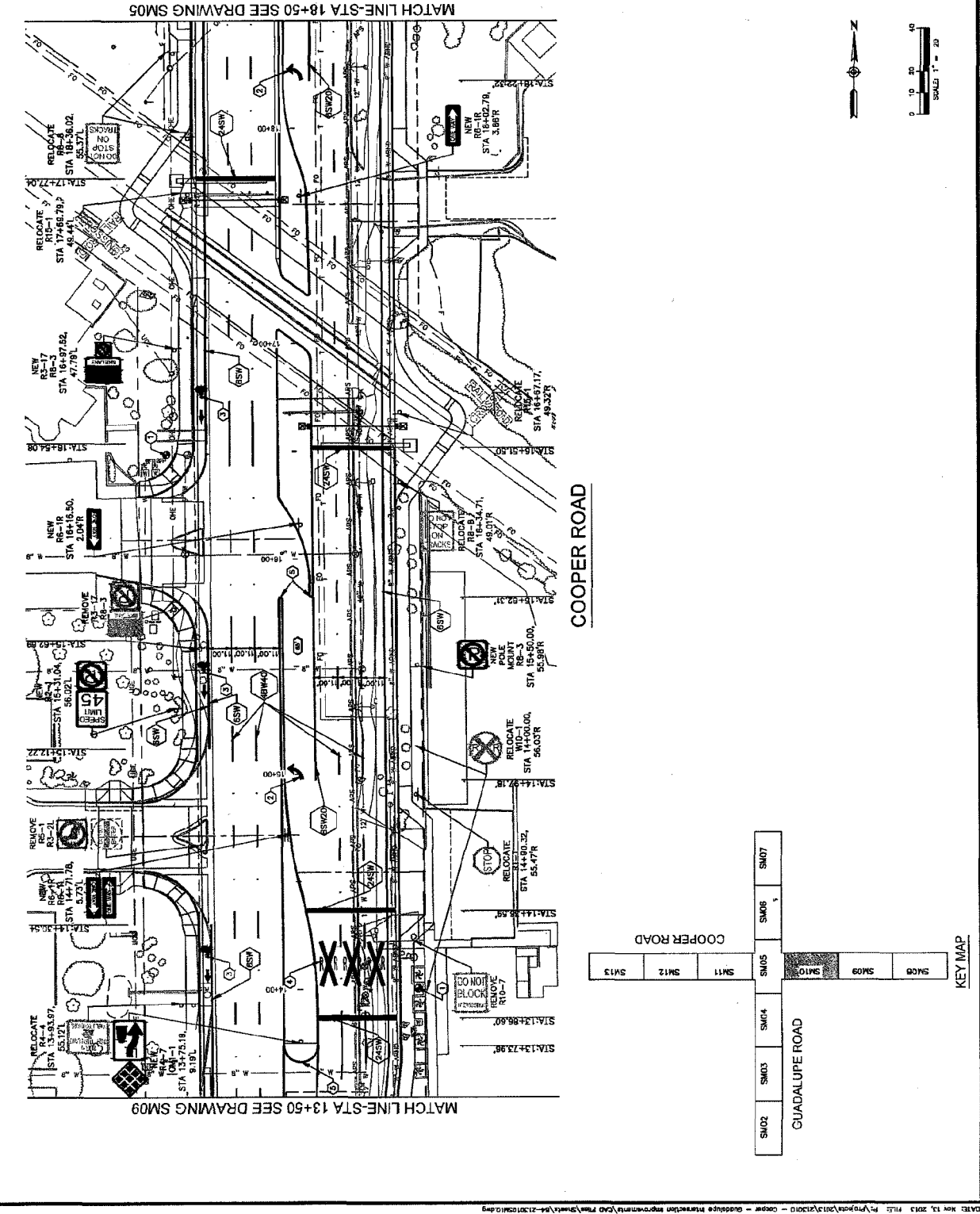
**RPA**  
 RICHARD POWELL  
 LAND ARCHITECTS  
 402.263.1177  
 www.rpaplanning.com

- 1 PAVEMENT MARKER FOR FIRE HYDRANT PER T.O.G. DET. 61
- 2 ARROW PER MULTICL. PROBE 3B-24 AND T.O.G. DET. 301C
- 3 EASE CROSSLAND AND ARROW PER T.O.G. DET. 301A
- 4 FORWARD AND GRADE CROSSING PAVEMENT MULTICL. PROBE 3B-24 AND T.O.G. DET. 301C
- 5 MEDIAN END TO BE PAINTED PER T.O.G. DET. 304
- 6 TURN LANE STORAGE LENGTH (IN FEET)
- 6.5 CAR 03 TURNER LENGTH (IN FEET)

95% PRELIMINARY  
 NOT FOR  
 CONSTRUCTION

NO.	DATE	REVISION

**COOPER GUADALUPE IMPROVEMENTS**  
**PROJECT NO. STB84**  
**SIGNING AND MARKING PLAN**  
 STA 13+50 TO STA 18+50  
 DATE: 11/23/17  
 DRAWN BY: RPA  
 CHECKED BY: RPA  
 SCALE: 1" = 20'



## KEY MAP

